#### **FCC PILOT PROGRAM**

WC DOCKET NO. 02-60

HENDRICKS REGIONAL HEALTH 1000 EAST MAIN STREET DANVILLE, INDIANA 46122

Contact Person
Lowell A. Nicodemus
Director, Information Systems
Hendricks Regional Health
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# **Summary**

Hendricks Regional Health is requesting to be considered for the FCC Pilot Program and would be an exceptional candidate because of the presently existing level of technology at their facilities. Assistance from the Pilot Program would showcase an extremely high level of medical records technology. In 2005, Hendricks Regional Health wanted a fiber optic connectivity for affordable bandwidth. They teamed up with a local Internet Service Provider (ISP) to build and lease fibers through an Indefeasible Right of Use (IRU) for 30 years to connect four of its campuses in Danville, Avon, Plainfield and Brownsburg, Indiana. This fiber backbone also connects them to a major Data Center located at Henry Street in Indianapolis, Indiana. The hospital is developing a Disaster Recovery facility and mirrors electronic medical data as a backup at Henry Street to comply with HIPPA regulations. This system has been built and is connected at 10Gigabits/sec.

# **Goals and Objectives**

The goals and objectives of the Hendricks Regional Health project are:

- 1. To provide secure and reliable high speed broadband capabilities to present and future medical health care facilities across the western area of Hendricks County. This need is predicated by the forecast rapid growth of business and population around the Indiana State Road 39/ Interstate 74 and the Indiana State Road 39/ Interstate 70 interchanges. Both of these areas are slated for rapid growth due to on going expansions of the Indianapolis International Airport.
- 2. To complete a proposed build-out of our present fiber optic backbone in order to develop a self-healing ring to augment the current hub and spoke architecture. A self-healing ring is superior and more reliable than a hub and spoke design, because the ring provides redundant data paths in case a fiber segment is broken. A hub and spoke doesn't. HIPPA regulations state "Each person who maintains or transmits health information shall maintain reasonable and appropriate administrative, technical, and physical safeguards to ensure the integrity and confidentiality of the information; to protect against any reasonably anticipated threats or hazards to the security or integrity of the information." Adequate transport of vital medical communications is critical to guarantee full compliance with HIPPA regulations. The proposed construction of a self-healing ring will protect the transport of crucial medical information.

3. To provide EMS agencies in the counties of Hendricks and Morgan with the means to greatly enhance the medical care and security of the citizens of those counties by making patient records rapidly available to hospital emergency departments, EMS administration and to disease surveillance monitors. Please see attached "Letter of Support".

# **Organization Responsible**

Hendricks Regional Health (HRH) is a growing healthcare system in a fast-growing community in central Indiana and is dedicated to delivering high quality care to the region. Located immediately west of Indianapolis in Hendricks County, Indiana, HRH is a 501(c)(3) not-for-profit organization serving an area of over 220,000 residents. HRH discharges over 7,000 inpatients annually and currently owns and operates the Hendricks Regional Health Medical Group (HRHMG) in several locations throughout the primary service area. HRH provides EMS services for all of Hendricks County and the Northern portion of Morgan County. Additionally, Hendricks Regional Health and PHI Air Medical provides immediate, emergency air medical care (Dove Flight 4) to critically ill or injured patients in its service area..

# **Source of Financial Support**

Hendricks Regional Health requires that all expenditures over \$25,000 will need Board of Directors approval. The Fiber Backbone expansion has already been added to the HRH's Strategic Plan, so it is anticipated that monies would be approved to cover this financial obligation.

### **Facilities Included**

Hendricks Regional Health Danville (RUCA 22-1.0)

1000 East Main Street Danville, Indiana 46122 Phone: 317-745-4451

Hendricks Regional Health Avon (RUCA 23-1.0)

8244 East U.S Highway 36 Avon, Indiana 46123

Phone: 317-272-7500

Hendricks Regional Health Plainfield (RUCA 68-1.0)

1100 Southfield Drive Plainfield, Indiana 46168 Phone: 317-839-7200 Hendricks Regional Health Brownsburg (RUCA 12-1.0)

1411 South Green Street Brownsburg, Indiana 46112 Phone: 317-852-7700

Lizton Family Medicine (RUCA 49-2.0)

1045 Wyatt Way Lizton, Indiana 461

Lizton, Indiana 46149 Phone: 317-994-6605

Other Cities that fiber will go through are as follows:

Clayton, Indiana 46118 (RUCA 18-2.0) Pittsboro, Indiana 46167 (RUCA 67-1.0)

# **Previous Experience**

Mr. Lowell A. Nicodemus will be managing the plan and as shown in the biography below has considerable experience with this type of project planning and management both with Hendricks Regional Health and prior to coming on board with Hendricks.

Lowell A, (Nick) Nicodemus has been Director of information Systems at Hendricks Regional Health (HRH) since August, 1999. In that time he has overseen a period of continuous rapid growth in its computer systems. The installed base of machines has increased from 10 servers to 100 and personal computers from 300 to 1,500. Highlights in this growth include the building of HRH's own fiber backbone linking four of its five campuses and connected to a Point of Presence (POP) in Indianapolis, Installation of a state-of-the-art ANSI 802.11 WLAN within the HRH Campuses and subsequent connection with various remote healthcare services, and implementation of Lotus Notes Groupware with over 100 internally developed applications (many work flow enabled), Prior to that Nick had been retained as a Y2K consultant for HRH.

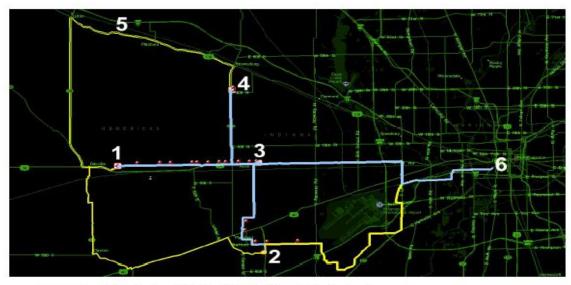
Before coming to HRH, Nick was Vice President, Operations for Automated Technologies Associates; a software development company manufacturing statistical process control computer software. Preceding that, he was with PSI Energy for 19 years. PSI Energy is an electrical utility serving Indiana. While at PSI Energy, Nick successfully managed the implementation of a computerized materials management system linking five generating stations and 40 district storerooms across the State of Indiana; and the development and implementation of a quality assurance program for construction of a nuclear power plant.

Nick's professional activities include membership in the College of Healthcare Information Management Executives (CHIME) and the Health Information Management Systems Society (HIMSS). He has served as Executive Chair of the Indianapolis Section of the American Society for Quality (ASQ) and Chair of the Indiana Quality Committee for The Indiana Business Modernization and Technology Corporation, He has presented papers at several conferences including the American Power Conference and was a guest speaker at Indiana University's Conference to Examine Quality Standards Being Required of Companies Going Global.

# **Project Management Plan, Budget and Timeline**

Hendricks Regional Health Fiber Initiative

- 1) Hendricks Regional Health Hospital (Danville, Indiana)
- 2) Hendricks Regional Health Hospital (Plainfield, Indiana)
- 3) Hendricks Regional Health Hospital (Avon, Indiana)
- 4) Hendricks Regional Health Hospital (Brownsburg, Indiana)
- 5) Hendricks Regional Health Hospital (Lizton, Indiana)
- 6) Point of Presence (Data Center Downtown Indianapolis, Indiana)



Hendricks Regional Health (Existing Fiber Optic System)

Proposed New Fiber Optic Construction (58.41 Miles)

Estimated Cost

Fiber Optic Construction @ \$50,000.00 per mile = \$ 2,920,500.00

HENDRICKS REGIONAL HEALTH FIBER OPTIC INITIATIVE TIMELINE 2007-2008												
TASK LIST	JUL	AUG	SEP	ост	NOV	DEC	MAL	FEB	MAR	APR	MAY	JUN
Potential Grant Availability	☆											
Detailed Engineering Design			#Red W									
Permits			r		<b>&gt;</b>							
Bid Document Preparation					Entered to the same							
Fiber Optic Construction												
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# **How Project will be Self Sustaining**

The project will be self sustainable through Hendricks Regional Health assuming the remaining costs of the fiber build and annual maintenance and inspection fees. To allay these costs Hendricks Regional Health may sell excess dark fiber capabilities to non-owned healthcare facilities at a per fiber mile cost equal to 15% of the total project plus pro-rated annual maintenance and inspection fees. This business model has been successful with Hendricks Regional Health's first fiber project. Costs of that project are being allayed by selling excess dark fiber to neighboring cities. These cities are then using their fiber optics to provide high speed bandwidth to link their public safety and educational facilities.

Respectfully Submitted,

Dennis W. Daules

Authorized Agent Dennis W. Dawes

**President and Chief Executive Officer** 

**Hendricks Regional Health** 

#### **ATTACHMENT A**

Dear Colleagues,

As Medical Director of EMS for multiple Hendricks and Morgan County EMS agencies I would like to offer you my heartfelt request for support in the grant sought by Hendricks Regional Health for the fiber-optic network.

EMS agencies in these counties provide care to thousands of citizens a month and document this care on patient care reports. These medical records serve the obvious need, but also are reviewed by administrative personnel, and by me, to ensure proper Quality control and improvement. Additionally and just as importantly, the data gathered from these records is vital for surveillance monitoring for the rapid recognition of and response to disease outbreaks and bioterrorism events.

Current paper records are minimally effective for these uses and we are currently developing electronic record keeping for EMS to help. However, vital to these tasks being effective is the ability to rapidly transmit this data to hospital emergency departments, EMS administrators and to disease surveillance monitors.

The fiber-optic system planned by Hendricks Regional Health will greatly enhance the medical care and security of the citizens of these counties by making these important tasks possible. I offer you my highest recommendation for and support the hospital in its plea for this grant.

Thank you for considering this request.

Sincerely,

James R Nossett, MD, FACEP Medical Director of EMS Hendricks Regional Health PHI Dove Flight 4